

## CLAIMS

1        1.    A method for treatment of neurological or immunological  
2 disorders in a patient comprising the step of stimulating  
3 secretion of pancreatic juices in said patient.

1        2.    The method of claim 2 wherein the step of stimulating  
2 secretion of pancreatic juices comprises the step of  
3 administering to said patient an effective amount of secretin.

1        3.    The method of claim 2 wherein said effective amount of  
2 secretin is administered by infusion.

1        4.    The method of claim 3 wherein administering said  
2 effective amount of secretin by infusion includes the step of  
3 intravenously infusing secretin in an amount of about 2 clinical  
4 units (CU) per kilogram (kg) of body weight.

1        5.    The method of claim 2 wherein said effective amount of  
2 secretin is administered transdermally.

1        6.    The method of claim 5 wherein administering said  
2 effective amount of secretin transdermally includes the steps of:  
3        applying a transdermal carrier substance to a portion of the  
4 skin of said patient; and  
5        applying crystalline secretin in said effective amount onto  
6 said transdermal carrier substance.

1           7.     The method of claim 6 wherein said transdermal carrier  
2 substance includes dimethyl sulfoxide (DMSO).

1           8.     The method of claim 6 wherein said effective amount of  
2 secretin includes between 5 and 20 clinical units (CU) of  
3 crystalline secretin per dose.

1           9.     The method of claim 6 wherein said transdermal carrier  
2 substance is selected from the group consisting of a gel and a  
3 lotion.

1           10.    The method of claim 5 wherein administering secretin  
2 transdermally includes administering said effective amount of  
3 secretin with a patch to be applied to a portion of the skin of  
4 said patient.

1           11.    The method of claim 5 wherein administering secretin  
2 transdermally includes administering said effective amount of  
3 secretin using acoustic waves causing said secretin to permeate a  
4 skin surface of said patient.

1           12.    The method of claim 2 wherein said effective amount of  
2 secretin is administered orally.

1           13.    The method of claim 12 wherein said effective amount of  
2 secretin is administered orally using an oral carrier selected  
3 from the group consisting of a tablet, capsule or lozenge.

1        14. The method of claim 2 wherein said effective amount of  
2        secretin is administered using a suppository.

1        15. The method of claim 2 wherein said effective amount of  
2        secretin is administered by inhalation.

1        16. The method of claim 2 wherein said neurological  
2        disorders include autistic spectrum disorders.

1        17. The method of claim 2 wherein said effective amount of  
2        secretin includes an amount of secretin sufficient to increase  
3        serotonin levels in the brain of said patient.

1        18. The method of claim 1 wherein stimulating secretion of  
2        said pancreatic juices increases at least one neuropeptide  
3        hormone select from the group consisting of serotonin, dopamine  
4        and ~~CCK~~ levels in said patient.

1        19. The method of claim 1 wherein the step of stimulating  
2        secretion of pancreatic juices includes the step of causing  
3        secretion of an effective amount of secretin in said patient.

1        20. The method of claim 19 wherein the step of causing  
2        secretion of an effective amount of secretin in said patient  
3        includes stimulating the duodenum of said patient to produce  
4        secretin.

1        21. A composition for treatment of neurological or  
2 immunological disorders in a patient comprising an effective  
3 amount of secretin and a physiologically acceptable carrier.

1        22. The composition of claim 21 wherein said  
2 physiologically acceptable carrier includes a transdermal carrier  
3 substance.

1        23. The composition of claim 22 wherein said transdermal  
2 carrier substance includes dimethyl sulfoxide (DMSO).

1        24. The composition of claim 23 wherein said effective  
2 amount of secretin includes about 15 clinical units (CU) of  
3 crystalline secretin per dose.

1        25. The composition of claim 21 wherein said  
2 physiologically acceptable carrier includes sodium chloride for  
3 dissolving said effective amount of secretin.

1        26. The composition of claim 25 wherein said effective  
2 amount of secretin includes about 2 clinical units (CU) per  
3 kilogram (kg) of body weight of said patient per dose.

1        27. The composition of claim 21 wherein said  
2 physiologically acceptable carrier includes an oral carrier.

1        28. The composition of claim 21 wherein said  
2 physiologically acceptable carrier includes an inhalable carrier.

1           29. The composition of claim 21 wherein said composition is  
2 for the treatment of autism.

1        30. A method for the treatment of autism comprising the  
2 step of administering to said patient an effective amount of  
3 secretin.

1        31. The method of claim 30 wherein said effective amount of  
2 secretin is administered by infusion.

1        32. The method of claim 31 wherein administering said  
2 effective amount of secretin by infusion includes the step of  
3 intravenously transfusing secretin in an amount of about 2  
4 clinical units (CU) per kilogram (kg) of body weight per dose.

1        33. The method of claim 30 wherein said effective amount of  
2 secretin is administered transdermally.

1        34. The method of claim 33 wherein administering said  
2 effective amount of secretin transdermally includes the steps of:  
3        applying a transdermal carrier substance to a portion of the  
4 skin of said patient; and  
5        applying crystalline secretin in said effective amount onto  
6 said transdermal carrier substance.

1        35. The method of claim 34 wherein said transdermal carrier  
2 substance includes dimethyl sulfoxide (DMSO).

1        36. The method of claim 35 wherein said effective amount of  
2 secretin includes about 15 clinical units (CU) of crystalline  
3 secretin per dose.